

OBITUARY

DR JOHN DAVID BRADLEY



John Bradley was born in London on 24 December (Christmas Eve) 1920 and died at Chard, Somerset, on 4 January 2004. Most of his adult life was spent in the Department of Entomology, British Museum (Natural History), now known as The Natural History Museum, London. I had been working there for four years when John joined the staff in 1938; an immediate and life-long friendship ensued and I was in touch with him, apart from the war years, either personally, or latterly by telephone, at least monthly. On the outbreak of war in 1939 John joined the Army and the next six years were spent mainly in North Africa, Italy and Austria.

On his return to the Museum he found himself immersed in the urgent task of curation of the vast collection of Microlepidoptera amassed by Edward Meyrick, which had been acquired in 1938 (it consisted of over 100,000 specimens including more than 14,000 unmarked types). This, in turn, led to his association with J. F. (Jack) Gates Clarke, who was seconded from the United States National Museum in Washington (The Smithsonian) to work on the Meyrick types. This work was published by the BM(NH) in eight thick volumes as *An illustrated catalogue of the Meyrick types* (1955–1970).

In 1964 John transferred to the Identification Service of the Commonwealth Institute of Entomology (subsequently Commonwealth Agricultural Bureau, Institute of Entomology) but his workstation continued to be at his old desk in the Natural History Museum (see portrait). In 1967/8 he was an external student of the Charles University (Foreign Branch) in Prague and was awarded the equivalent of Ph.D.

He became an authority and consultant in the vast field of Microlepidoptera worldwide and an enthusiastic field worker on the British species. One of his major

works (jointly with W. G. Tremewan and the inspired art-work of Arthur Smith) was the two volume *British Tortricoid Moths* which was published by the Ray Society, London, 1973/1979.

He was an Honorary Member of the British Entomological & Natural History Society which he joined in 1946 when it was known as the South London Entomological & Natural History Society. In 1951 he became a Fellow of the Royal Entomological Society and he also served on the Council and as Vice-President of the Ray Society.

The *Entomologist's Gazette* was founded in 1950 and John was one of the first subscribers: he was a member of its editorial panel from 1953 to 1979, acting as Assistant Editor or Editor from 1954 to 1965.

On his retirement he became acutely aware, cut off as he was from the library resources of the Museum, of the need for an up-to-date and accurate list of the Lepidoptera of Great Britain and Ireland and bent his energies to that end. The *Checklist of the Lepidoptera recorded from the British Isles* was published under his own imprint in 1998, a second, revised, edition appearing in 2000.

He was a quiet and reserved man but was comfortably at ease with a host of fellow entomologists. In all our long acquaintance I never heard him say an unkind word about anybody—indeed the only harsh words he ever uttered were about something over which he had no control—inclement weather on a collecting trip!

E. W. CLASSEY

SHORT COMMUNICATION

Combative behaviour in *Anomoia purnunda* (Harris) (Diptera: Tephritidae).—On 5.vii.1999, I observed several individuals of *Anomoia purnunda* assembled on the patio at my home near Loddon Bridge, Earley, Reading (SU 763716). The patio was some 20 metres from a large hawthorn *Crataegus monogyna* Jacq. (Rosaceae), the most probable host plant, though *Pyraecantha coccinea* Roemer and *Cotoneaster* sp., also known host plants were present. There were about 13 flies in the group, and near its centre a pair of individuals were standing with their heads touching (Fig. 1). They attempted to push each other over backwards. The remaining individuals appeared to be watching the proceedings. I observed this behaviour for about 10 to 12 minutes, though not continuously since I needed to fetch a camera. When one of the combatants lost its balance the combat ceased and another two individuals began the same type of behaviour. During the time I was watching I never observed more than one pair of individuals fight at any one time. The other flies continued to watch the proceedings intently.

Interactions between males belonging to the family Tephritidae are reviewed by Preston-Mafham & Preston-Mafham (1993). A number of species, particularly those that have a range of food plants rather than a single host, form leks for display and ritual combative behaviour. *Anomoia purnunda* appears to be one of these. Similar activities also occur in Drosophilidae. Both families are unusual in the animal kingdom in that males rather than females emit sex pheromones, and there are obvious advantages in having jousting competitions so that the concentration of pheromones in one place will make it easier for the females to detect males when the latter are some distance from the food plant.

The tribe Trypetini, to which *A. purnunda* belongs, contains a number of species that feed, display and mate on other substrates (Han 2000). In the celery fly *Euleia heraclei* (L.), adult insects are hardly ever seen on their host plants whereas the